

REMARKS/DISCUSSION OF ISSUES

Claims 1-28 are pending in the application.

Reexamination and reconsideration are respectfully requested in view of the following Remarks.

35 U.S.C. §§ 102 and 103

The Office Action rejects: claims 1-3, 6-17, 19-25, 27 and 28 under 35 U.S.C. § 102 over Sorokine et al. U.S. Patent 6,430,414 ("Sorokine"), and claims 4, 5, 18 and 26 under 35 U.S.C. § 103 over Sorokine in view of Raith U.S. Patent 6,711,408 ("Raith").

Applicants respectfully traverse all of these rejections for at least the following reasons.

Claim 1

Among other things, the method of claim 1 includes calculating a respective probability of future access by a mobile device for each of a plurality of nodes in a sensor net in response to detected access attempts by one or several mobile devices to the plurality of nodes, and then communicating information related to these calculated probabilities through the sensor net.

Applicants respectfully submit that Sorokine does not disclose any method including such features.

The Office Action confusingly cites col. 10, lines 58-62 as supposedly disclosing "*calculating a respective probability of future access by a mobile device*" and then cites a completely different text at col. 7, lines 15-18 as supposedly disclosing "*for each of the multiple nodes in response to said detecting.*"

Here is the text at col. 10, lines 58-62:

In another embodiment of the invention, the BSC 31 prioritizes the ENL using the results of a channel prediction process so that the MS 10 can concentrate its searcher power on pilots with a higher likelihood to be the handoff candidate.

And here is the text at col. 7, lines 15-18:

loop for forward traffic channel power control. The outer¹⁵
power control loop estimates a setpoint value based on
Eb/Nt to achieve a target frame error rate ("FER") on each
assigned forward traffic channel. These setpoints are com-

The first portion of text merely discloses that a base station controller (BSC) can prioritize an effective neighbor list (ENL) using a channel predictive process so that a mobile station can concentrate on pilots which are more likely to be a good candidate for a soft handoff. The second portion of text discloses that a mobile station (MS) can estimate a setpoint value for a base station to achieve a target frame error rate through a forward traffic channel.

There is no mention in the two portions of text reproduced above of calculating any probability of any mobile device accessing any nodes. At most, there is a mention of rankings in an ENL that correspond to the likelihood that each BS mentioned in the ENL would be a good candidate for a successful soft handoff – which may or may not ever even occur – at a particular instant in time. This certainly cannot in any way be equated to a probability that any MS will actually ever access a particular BS.

Furthermore, in the method of claim 1, the probabilities are calculated in response to detected access attempts by one or several mobile devices to the plurality of nodes.

In stark contrast, the "likelihoods" mentioned at col. 10, lines 58-62 are calculated based on channel predictive models, and are not in any way calculated in response to actual detected access attempts by one or several mobile devices to the plurality of nodes.

Additionally, the method of claim 1 includes communicating information related to these calculated probabilities through the sensor net.

The Office Action states that Sorokine discloses this at col. 7, lines 18-20.

Here is the text of Sorokine at col. 7, lines 18-20:

assigned forward traffic channel. These setpoints are communicated to the BS either implicitly or through signal messages. The differences between these set points helps the ²⁰

Here the text plainly refers to setpoints calculated by a MS being communicated from the MS to a BS. These setpoints correspond to required signal strengths to achieve a desired packet error rate for the MS. The setpoints are not information related to any calculated probabilities, and more specifically are not related to any probabilities that a mobile device will access a particular node of a sensor net. Furthermore, these setpoints calculated by the MS have nothing to do with the “likelihoods” that are independently calculated by the BSC and mentioned at col. 10, lines 58-62.

So Applicants respectfully submit that there is no way to twist and contort the teachings of Sorokine to somehow try to get them to read on the method of claim 1 and still include all of the features recited therein.

Finally, the method of claim 1 also includes routing measurement data for collection to respective ones of the multiple nodes utilizing the calculated probabilities.

The Office Action fails to identify with any specificity what in Sorokine is believed to correspond to the recited measurement data.

The Office Action cites col. 1, lines 32-35.

Here is the text at col. 1, lines 32-35:

One particularly important feature of CDMA systems for effective third generation wireless communication is the soft handoff, which allows the MS to move smoothly from the coverage of one cell to another without interruption. The soft ³⁵

The cited text does not mention any measurement data. The cited text does not mention routing of any measurement data to any node for collection. The cited text does not mention that any measurement data is routed using any calculated probabilities.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 1 is clearly patentable over Sorokine.

Claims 2-3 and 6-15

Claims 2-3 and 6-15 all depend from claim 1 and are deemed patentable for at least the reason set forth above with respect to claim 1, and for the following additional reasons.

Claim 2

Applicants respectfully submit that the cited text at col. 7, lines 9-22 discloses communicating set points from an MS to a BS.

The cited text clearly does not disclose communicating any received probabilities through any sensor net, or using any such probabilities to route any measurement data through a sensor net.

The Examiner is respectfully requested to cite something in Sorokine which actually discloses these features, or else withdraw the rejection of claim 2.

Claim 3

Applicants respectfully submit that the cited text at col. 7, lines 27-32 discloses dynamically optimizing a neighbor list for a particular base station.

The cited text clearly does not mention anything about any access patterns. The cited text clearly does not disclose detecting, calculating, and communicating occur repetitively causing routing of measurement data to vary dynamically in response to changes in access patterns associated with mobile devices.

The Examiner is respectfully requested to cite something in Sorokine which actually discloses these features, or else withdraw the rejection of claim 3.

Claims 6-9 and 12-13

The undersigned attorney is confident that none of the cited portions of text could even remotely be construed as disclosing the features recited in any of the

dependent claims 6-9 and 12-13. To avoid subjecting Applicants to an unnecessary Appeal and Appeal Brief, the undersigned attorney respectfully requests that the Examiner carefully reconsider these rejections and either cite something in Sorokine which actually does disclose these features, or else withdraw the rejections of claims 6-9 and 12-13.

Claim 16

At the outset, it is noted that two Office Actions have now both avoided actually identifying any component in Sorokine's wireless communication system as even allegedly corresponding to the recited sensor device. Such identification should be very easy to do, given that Sorokine's wireless communication system consists of only three types of components: mobile stations (MS), base stations (BS), and a base station controller (BSC). A clear, explicit, identification of which of these devices is supposed to correspond to the recited sensor device of claim 16 would be beneficial for clarifying the record in the event that the present rejections are maintained, and Applicants are forced to Appeal this case to the Board. Undoubtedly the Examiner will finally have to make such an explicit identification in an Examiner's Answer if it is expected that the Board would ever uphold the rejection of claim 16.

Therefore, in the event that the present rejections are maintained, Applicants respectfully request that the Examiner clearly and explicitly identify what component in Sorokine's wireless communication system allegedly corresponds to the recited sensor device that operates in a sensor net as recited in claim 16.

Meanwhile, among other things, the sensor device of claim 16 includes means for calculating a probability of future access by a mobile device to the sensor device utilizing recorded attempts to access measurement data by mobile devices; means for receiving information related to probabilities of future access associated with other sensor devices within said sensor net; and means for communicating information related to probabilities of future access to other sensor devices.

As explained above with respect to claim 1, Applicants respectfully submit that Sorokine does not disclose calculating a probability of future access by a mobile device to a sensor device utilizing recorded attempts to access measurement data by

mobile devices. Thus, Sorokine also fails to disclose any **sensor device that includes any means for calculating a probability of future access** by a mobile device to the (very same) sensor device utilizing recorded attempts to access measurement data by mobile devices. For the record, it is also noted that in Sorokine the “likelihoods” of a BS being a good candidate for soft switchover, which are mentioned in the cited col. 10, lines 58-62 are calculated by the BSC 31, and not by any base station (BS) itself.

Furthermore, Applicants respectfully submit that Sorokine very clearly does not disclose any such **sensor device that also includes any means for receiving information related to probabilities of future access associated with other sensor devices** within said sensor net. For the record, it is also noted that the cited text at col. 10, lines 58-62 does not mention any probabilities being received by any sensor device of a sensor net – and even more particularly, not by any sensor device which **also** includes means for calculating a probability of future access by a mobile device to a sensor device utilizing recorded attempts to access measurement data by mobile devices, as recited above.

Additionally, Applicants respectfully submit that Sorokine very clearly does not disclose any such **sensor device that also includes any means for communicating** information related to probabilities of future access **to other sensor devices**.

Finally, as explained above with respect to claim 1, Sorokine very clearly does not disclose means for routing measurement data within a sensor net in response to any means for calculating a probability of future access and means for receiving information related to probabilities of future access associated with other sensor devices.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 16 is clearly patentable over Sorokine.

Claims 17 and 19-24

Claims 17 and 19-24 depend from claim 16 and are deemed patentable for at least the reasons set forth above with respect to claim 16. Also, at a bare minimum,

the undersigned attorney is confident that none of the cited portions of text could even remotely be construed as disclosing the features recited in any of the dependent claims 17, 20 or 24. To avoid subjecting Applicants to an unnecessary Appeal and Appeal Brief, the undersigned attorney respectfully requests that the Examiner carefully reconsider these rejections and either cite something in Sorokine which actually does disclose these features, or else withdraw the rejections of claims 17, 20 and 24.

Claim 25

Among other things, the method of claim 25 includes determining probabilities of future access by mobile devices to nodes of a sensor net.

As explained above with respect to claim 1, Applicants respectfully submit that a likelihood that a particular BS would be a good candidate for soft handoff by a MS is not a probability that a node will be accessed in the future by a mobile device. Applicants respectfully submit that Sorokine does not disclose determining probabilities of future access by mobile devices to nodes of a sensor net.

Also as explained above with respect to claims 1 and 16, Sorokine does not disclose distributing information related to such determined probabilities through a sensor net. In that regard, it is again noted that set point values which are determined by a MS to meet a particular target frame error rate are not related to likelihood – calculated by a BSC 31 - that a neighboring BS will be a good candidate for a soft handoff from a particular serving BS.

Finally, as also explained above with respect to claim 1, Sorokine does not disclose routing any measurement data utilizing the distributed information related to the determined probabilities.

Accordingly, for at least these reasons, Applicants respectfully submit that claim 25 is clearly patentable over Sorokine.

Claims 27 and 28

Claims 27 and 28 depend from claim 25 and are deemed patentable for at least the reasons set forth above with respect to claim 25. Also, the undersigned attorney is confident that none of the cited portions of text could even remotely be

construed as disclosing the features recited in any of the dependent claims 27 and 28. To avoid subjecting Applicants to an unnecessary Appeal and Appeal Brief, the undersigned attorney respectfully requests that the Examiner carefully reconsider these rejections and either cite something in Sorokine which actually does disclose these features, or else withdraw the rejections of claims 27 and 28.

Claims 4, 5 18 and 26

At the outset, claims 4, 5 18 and 26 depend variously from claim 1, 16 and 25. Applicants respectfully submit that Raith does not cure the deficiencies of Sorokine as set forth above with respect to claims 1, 16 and 25. So claims 4, 5 18 and 26 are deemed patentable for at least the reasons set forth above with respect to claims 1, 16 and 25, and for the following additional reasons.

Raith at col. 8, lines 54-64 does not disclose: (a) calculating a time window average of detected access attempts to a node of a sensor net; or (b) correlating probabilities of access to a time of day. Therefore, to avoid subjecting Applicants to an unnecessary Appeal and Appeal Brief, the undersigned attorney respectfully requests that the Examiner carefully reconsider these rejections and either cite something in Raith which actually does disclose these features, or else withdraw the rejections of claims 5, 18 and 26.

Applicants also respectfully traverse the proposed combination of Sorokine and Raith as lacking any articulated purpose or reason.

The text cited in Raith at col. 8, lines 55-61 merely state that a reason for initiating call handoff may be stored in memory, and one exemplary reason for a handoff would be to avoid barring new call attempts. That is all. Nothing in this text even remotely suggests that calculating a time window average of detected access attempts to a node of a sensor net; or correlating probabilities of access to a time of day, would somehow avoid barring new call attempts.

CONCLUSION


In view of the foregoing explanations, Applicants respectfully request that the Examiner reconsider and reexamine the present application, allow claims 1-28 and

pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (571) 283.0720 to discuss these matters.

Respectfully submitted,

VOLENTINE & WHITT

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By: 
Kenneth D. Springer
Registration No. 39,843

VOLENTINE & WHITT
One Freedom Square
11951 Freedom Drive, Suite 1260
Reston, Virginia 20190
Telephone No.: (571) 283.0724
Facsimile No.: (571) 283.0740